

DNA history collection kept whole by Venter

Genomics pioneer Craig Venter has bought an archive of historic molecular-biology documents, which he plans to put on public display at one of his research facilities in Maryland.

Venter, founder of The Institute for Genomic Research in Rockville, Maryland, bought the Jeremy Norman Molecular Biology Archive earlier this month for an undisclosed sum. Norman, a rare-book dealer in California, had assembled a collection of papers relating to the history of DNA (see *Nature* 411, 732–733; 2001). The archive includes a marked-up proof of the 1953 *Nature* paper by Francis Crick and James Watson reporting the double-helix structure of DNA.

In 2003, the auctioneers Christie's valued the collection at between US\$2.2 million and \$3.3 million, then cancelled a planned sale once it became known that the papers would be split up.

"We look forward to sharing this tremendous compilation of molecular-biology history with others," Venter said in a statement. "We hope to complement the collection with additional key works."

Fault-drillers dig down to earthquake active zone

US earthquake researchers drilling into the volatile San Andreas fault in California have reached the seismically active zone, opening a fresh vista on what they call "the earthquake machine".

After drilling intermittently for more than a year, the San Andreas Fault

Observatory at Depth (SAFOD) team reached the seismically active zone, at a depth of nearly 4 kilometres, on 2 August. The borehole is in Parkfield, about halfway between Los Angeles and San Francisco on the 1,300-kilometre-long fault.

After logging the geochemical composition in the hole, the SAFOD team will cement steel casings in place and then insert seismometers. In 2007, after analysing seismic data from within the fault, the researchers will side-drill into newly identified active zones to place additional instruments.

Avian flu vaccine 'feasible' in humans, trials show

The first human tests of a vaccine against the H5N1 avian flu virus have met with mixed results. In trials run by the US National Institute of Allergy and Infectious Diseases in Bethesda, Maryland, the vaccine generated a strong immune response. But the amount of modified virus required to elicit that response is so high that it effectively rules out large-scale production of the vaccine.

Annual flu vaccines require 15 micrograms of modified virus per dose; the H5N1 vaccine needs 90 micrograms. Even if the entire US flu-vaccine production capacity were switched to making an H5N1 vaccine, it could make enough vaccine for only 15 million people.

The agency is working to cut the dose needed, for example by adding adjuvants — chemicals that can boost the response to a vaccine.

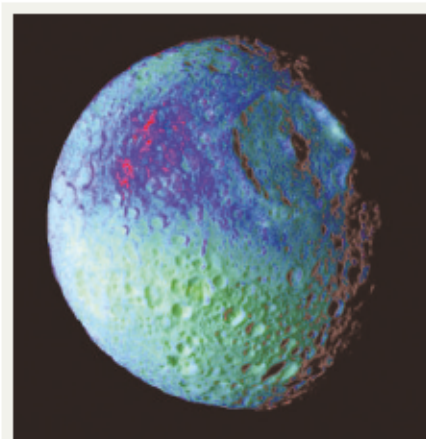
First data trickle in from Mars Express water diviner

The MARSIS radar instrument on Mars Express, the European Space Agency's orbiting craft, has collected its first data on the surface and atmosphere of the red planet.

The findings are eagerly anticipated because MARSIS is the first orbiting experiment capable of detecting buried reservoirs of water ice up to 5 kilometres deep. Project scientists say that it will take a few more weeks of analysis to weed out the subsurface signals and obtain useful results.

MARSIS was supposed to have begun collecting data in April 2004, a few months after Mars Express arrived in orbit around the planet. But fears that the radar's three long booms could damage the craft as they unfolded delayed their deployment until June.

The radar will continue its first round of observations until mid-August.



NASA/PL/SPACE SCIENCE INST

Cassini takes a closer look at Saturn's cratered moon

The Cassini spacecraft took this image of Saturn's heavily cratered moon Mimas on 2 August from a distance of just 228,000 kilometres. The 140-kilometre-wide Herschel crater appears in the upper right. Blue and violet colours represent areas where the surface of Mimas is weaker in infrared brightness than the rest of the surface, shown in green. The swaths of blue to the left of Herschel may represent debris kicked up from the interior of Mimas by the impact that created the crater.

DESY tunes up electron laser for experiments

The free-electron laser at Germany's high-energy particle-physics laboratory, DESY, in Hamburg, opened for business on 3 August. The €117-million (US\$145-million) facility produces intense pulses of tunable, short-wave ultraviolet radiation that last for 10 to 50 femtoseconds (one femtosecond is 10^{-15} seconds).

The pulses are generated when accelerated electrons are forced to wiggle along a winding path, radiating flashes of light at every turn. At least 200 scientists from around the world plan to use the pulses to directly observe, among other things, the formation of chemical bonds and the processes involved in the storage of magnetic data.

Correction

A mistake at our UK printers meant that the News story 'Drugs could head off a flu pandemic — but only if we respond fast enough' (*Nature* 436, 614–615; 2005) contained an error in European copies of *Nature*. This said that even if a flu outbreak was controlled, up to half of Thailand's population would be infected. In fact, there would be only 200 cases in this scenario. In addition, a comment about US spending on anthrax surveillance was attributed to Ben Schwartz when it was actually made by Mark Lipsitch of Harvard University.



Cutting through: the project to drill into the San Andreas fault has hit pay dirt.